

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 30 (canceled)

31. (new) An HVAC system for a motor vehicle including a passenger compartment, the HVAC system comprising:

an air inlet that receives recirculated air from the passenger compartment;

a conduit that is fluidly coupled to the air inlet for communicating the recirculated air through the HVAC system;

a blower disposed in the conduit for driving air through the conduit;

an evaporator disposed in the conduit downstream from the blower;

an air outlet coupled to the conduit downstream from the evaporator for communicating at least a portion of the recirculated air into the passenger compartment;

an air filter disposed in a pre-blower portion of the conduit between the air inlet and the blower;

at least one ultraviolet light source for treating microorganisms within the HVAC system disposed in the pre-blower portion of the conduit between the air inlet and the blower; and

a controller which is communicatively coupled to at least one ultraviolet light source and which selectively activates and deactivates the at least one ultraviolet light source;

wherein the controller monitors a state of a vehicle component that affects a vehicle power supply, and selectively activates and deactivates the at least one ultraviolet light source, based on the state of the vehicle component.

32. (new) The HVAC system of claim 1 wherein the at least one ultraviolet light source comprises a bulb for emitting ultraviolet light in the UV-C spectrum, effective to kill microorganisms.

33. (new) The HVAC system of claim 2 wherein the ultraviolet light emitted by the at least one ultraviolet light source is approximately 254 nm in wavelength.

34. (new) The HVAC system of claim 1 wherein the vehicle component is an ignition switch and wherein the state of the vehicle component comprises an ignition switch position.

35. (new) The HVAC system of claim 1 wherein the vehicle component is an engine.

36. (new) The HVAC system of claim 1 wherein the air filter is effective to remove foul odors from the recirculated air.

37. (new) The HVAC system of claim 1 wherein the conduit includes inner surfaces that absorb ultraviolet light, thereby preventing the transmission of ultraviolet light into the passenger compartment.

38. (new) The HVAC system of claim 1 wherein the conduit includes inner surfaces that reflect ultraviolet light, thereby increasing dispersion of ultraviolet light within the HVAC system.